

Why Potion Portals?

I looked at the potion portals project to analyse how the portal mechanics work to transition users from AR to VR and how to implement this into HolomeetVR. I did this to avoid having to reinvent the wheel.

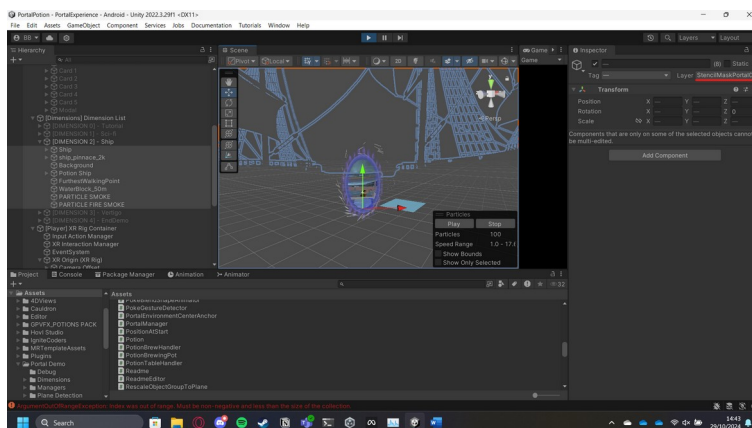
What is Potion Portals?

Potion Portals is a project set up by a previous intern at Dutch Rose Media with the goal of transitioning users from an AR environment to a VR one using portals. To create these portals users have to mix potions inside a cauldron, which when complete will create a portal leading to a Virtual environment. Inside this environment users can find a new potion with which a portal to another environment can be crafted.

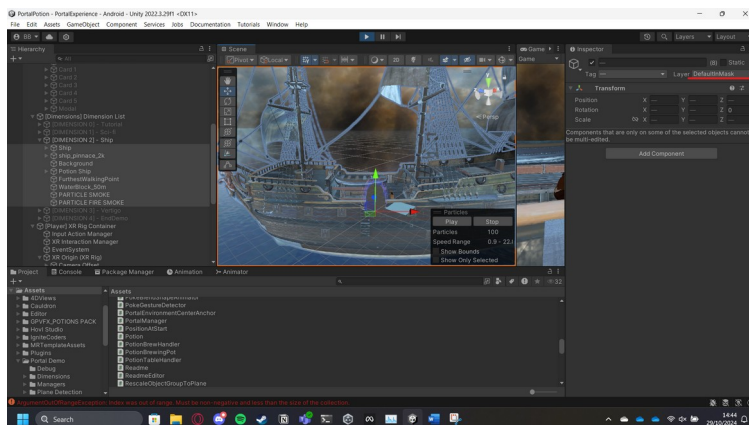
How does it work?

After looking at how the project works by scanning through the code and the editor i've discovered that the portals use layering and occlusion culling method.

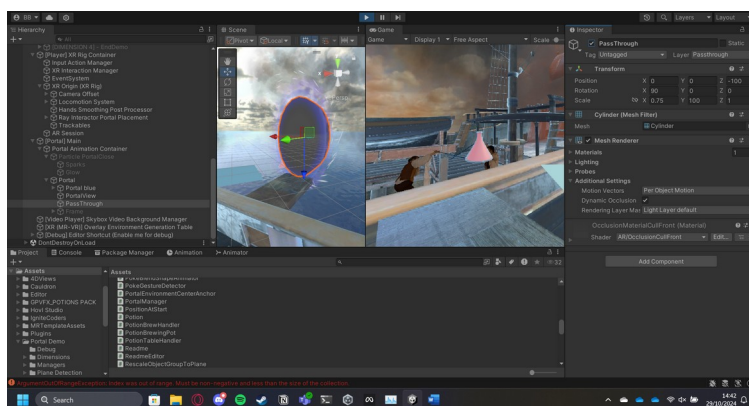
In this instance the boat starts out on the “StencilMaskPortal01” causing it to appear invisible on the outside but visible when looking through the portal. Inside the portal there is a specialized object using the “StencilPortalView” layer, because of this the ship is only visible when looked at through this layer mask.



When a user's steps through the portal the layer of the ship to "DefaultInMask" making it visible from the entire scene.



The portal however disables the PortalView object and instead activates a Passthrough Object using an occlusion cull to showcase the outside world through the portal instead of the virtual world.



Conclusion

By employing the same method of using layers to hide objects from the camera and the occlusion filter the same effect can be created for HolomeetVR to create an immersive experience for users.